## REMARKS

Reconsideration and allowance of the subject application are respectfully requested. By this Amendment, Applicant has canceled claim 1. Thus, claims 2-16 are now pending in the application. Applicant respectfully submits that the pending claims define patentable subject matter.

### I.    Rejection under 35 U.S.C. 112, first paragraph

Claims 8-16 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. In particular, the Examiner assert that:

> [n]owhere in the specification disclosed or suggest the claimed limitation of "a rank assigned to the slave by the preexisting network master which determined the rank" or "which [rank information] is assigned to the slave by the preexisting network master which determine the backup master rank information based on connection information received".

Applicant respectfully submits that the written description rejection is improper. In particular, the specification at page 12, line 3 – page 13, line 18 with reference to FIGS. 3 and 4 clearly describes these features, for example:

> the network master 400 receives connection information from the network slaves 300, i.e., A 300a, B 300b, C 300c, D 300d and E 300e, in order to check the connection status with each of the network slaves 300 in the network (S310). The connection information includes received signal strength indication (RSSI) and/or link quality .... The network master 400 determines the rank information of a backup master to be chosen as a new network master 400 when the preexisting network master leaves the network operating region, based on the connection

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information (S330) …. After the rank of the backup master, which is used for choosing a new network master, is determined with respect to all the slaves in step S330, the network master 400 announces the rank information of the backup master determined in step S330, to each slave through a broadcasting channel (S350). (emphasis added).

Accordingly, Applicant respectfully submits that the written description rejection is improper since it is quite clear that the specification describes the claimed invention in such a way as to reasonably to convey to one of ordinary skill in the art that the inventors, at the time the invention was filed, had possession of the claimed subject matter.

Claims 8-16 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. In particular, the Examiner asserts that "[n]owhere in the specification disclosed to enable one of ordinary skill in the art to 'check a rank assigned to the slave by the preexisting network master', when 'the preexisting network master has disappeared'."

Applicant respectfully submits that the enablement rejection is improper. In particular, the specification at page 14, lines 11-15 and page 15, lines 15-20 with reference to FIG. 6 clearly describes these features, for example:

> After the rank information of the backup master more likely to be chosen as a new network master is determined as illustrated in FIG. 5, each of the network slaves 300 A, B, C, D and E determines whether the preexisting network master 400 leaves the Network operating region (S410).
>
> …
>
> when the absence of the network master 400 in the network operating region is identified, each of the slaves checks for backup master rank information, which is

used to choose a new network master (S412). In step S412, each of the network slaves 300 checks for whether its rank is given the highest priority in order to be chosen as a new network master.

The Examiner further asserts that "[a]lthough the specification and the claims disclose that the connection information is received before the disappearance of the preexisting network master, the claims do not define when the checking step is perform." Again, Applicant respectfully submits that the Examiner's position is improper. Claim 8 recites:

> (b) if the preexisting network master has disappeared, checking a rank assigned to the slave by the preexisting network master which determined the rank based on connection information received from the slave by the preexisting network master, wherein the rank is used for choosing a new network master and is received before the disappearance of the preexisting network master. (emphasis added).

Similarly, claim 14 recites:

> (b) checking backup master rank information which is assigned to the slave by the preexisting network master which determined the backup master rank information based on connection information received by the preexisting network master from the slave, when it is determined that the preexisting network master has disappeared in the step (a); (emphasis added).

Accordingly, both the specification and claims describe checking backup master rank information after the preexisting network master has disappeared. Thus, Applicant respectfully submits that the written description rejection is improper since it is quite clear that the claimed invention was described in the specification in such a way as to enable one skilled in the art to make and use the invention.

## II. Prior Art Rejections

Claims 1, 2 and 7 remain rejected under 35 U.S.C. § 102(e) as being anticipated by Wils et al. (USP 6,397,260; hereafter "Wils"). Claim 3 remains rejected under 35 U.S.C. § 103(a) as being unpatentable over Wils in view of Erekson et al. (USP 6,836,862; hereafter "Erekson"). Claims 4 and 5 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over van Wils in view of Erekson and Lynch et al. (USP 5,586,338; hereafter "Lynch"). Claim 6 remains rejected under 35 U.S.C. § 103(a) as being unpatentable over Wils in view of Johansson (USP 6,975,613). Claims 8 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wils in view of newly cited Shinji et al. (JP 2000-295252; hereafter "Shinji"). Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wils in view of Shinji and Ying (USP 6,061,600). Claims 10-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wils in view of Shinji, Ying, Akyol et al (US 6,701,448; hereafter "Akyol") and "Official Notice". Claims 15-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wils, Shinji and Erekson.

### A. Claims 2-7

By this Amendment, Applicant has rewritten dependent claim 3 in independent form, canceled claim 1 and amended claim 2 to be dependent on claim 3.

With regard to claim 3, the Examiner concedes that Wils does not disclose "the received connection information includes received signal strength indication (RSSI) and/or link quality information". In view of this deficiency, the Examiner cites Erekson for disclosing the use of RSSI in communication devices and asserts that "[i]t would have been obvious ... to combine

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the teachings of Wils and Erekson because Erekson's teaching of using received signal strength

indication enables Wils' method to support devices used for voice applications to measure the

strength of the incoming signal." However, Applicant respectfully submits that it is quite clear

that Erekson does not provide any teaching or suggestion which would motivate one of ordinary

skill in the art to modify Wils to determine a priority of at least one of the plurality of slaves to

be used as a backup master, when a network master disappears, according to signal strength

indication (RSSI) and/or link quality information received from the at least one of the plurality of

slaves.

As discussed at column 5, lines 26-28 of Wils, "[t]he Backup routers are assigned

different priorities for assuming Master status when necessary, as described in RFC 2338." That

is, Wils does not disclose how the priority of the routers is determined but instead simply

indicates that the priority of the routers is preconfigured. Column 5, lines 51-54 of Wils (cited

by the Examiner in support of the rejection of claim 1) discloses that when a Backup router

determines that a Master router is unavailable based on VRRP Advertisements broadcast by the

Master router, the Backup router having the highest configured priority for each Virtual Router

assumes Master status for that Virtual Router. Column 6, lines 57-63 of Wils discloses that in

the case of initialization where no router has attained Master status, the routers broadcasting their

own Advertisement messages, and compare the priorities of broadcast Advertisements with their

configured priorities such that the router having the highest configured priority for each Virtual

Router assumes Master status for that Virtual Router, and the other routers assume Backup

status.

The Examiner asserts on page 17 of the Office Action that the claim "fails to define that the RSSI and/or link quality information is used to determine slave priorities." However, the Examiner is position is incorrect since the claim recites that "determining a priority ... according to the received connection information" and "the received connection information includes received signal strength indication (RSSI) and/or link quality information." Thus, under the standard principles of claim construction, since the claim language requires (1) priority is determined based on received connection information and (2) the received connection information is RSSI and/or link quality information, the claim language necessarily and explicitly requires that the priority is determined according to RSSI and/or link quality information. Any other interpretation by the Examiner is improper.

Further, the mere fact that Erekson merely discusses the use of RSSI in wireless devices (which is well known in the art) does not provide any motivation or suggestion to determine a priority of at least one of the plurality of slaves to be used as a backup master, when a network master disappears, according to RSSI received from the at least one of the plurality of slaves. Moreover, RSSI is not a parameter which would be used in a wired network such as Wils' network.

The Examiner asserts that "[s]ince the claims [fail] to define which connection link the RSSI is indicating, it would have been obvious that the RSSI may be indicating a signal strength other th[an] the connection between the master and the slave device (e.g., indicating signal strength of slave device and some wireless device." However, the Examiner's rationale is a text-book case of impermissible hindsight reasoning. In particular, Applicant submits that the Examiner is impermissibly using his knowledge of the present invention, in hindsight, to conclude

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that one skilled in the art would have found it obvious to modify the Wils based on Erekson to produce the claimed invention.

For example, as stated in W.L. Gore & Assoc., Inc. v. Garlock, Inc., 220 U.S.P.Q. 303, 312-313 (Fed. Cir. 1983):

> To imbue one of ordinary skill in the art with knowledge of the invention..., when no prior art reference or references... convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.

Moreover, it is also well settled that there must be some motivation that would have led one of ordinary skill in the art to modify the apparatus taught by the reference (in this case, the Wils reference) to arrive at the claimed invention.[1] As demonstrated above, the references clearly lack any teaching which would create such motivation.

Accordingly, Applicant respectfully submits that independent claim 3 should be allowable over the Examiner's proposed combination of Wils and Erekson.

In the July 13, 2006 Amendment, Applicant argued that dependent claims 4 and 5, should be allowable because Lynch does not teach or suggest if at least one of the plurality of slaves has a higher RSSI or link quality value than another one of the plurality of slaves, the at least one of the plurality of slaves is given a higher priority, which is used to choose a new network master (the Examiner concedes that Wils and Erekson do not disclose this feature of the claimed invention). However, the Examiner did not provide any response to this argument.

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[1]See, for example, Ashland Oil, Inc. v. Delta Resins & Refractories, Inc. 776 F.2d 281,227 USPQ 683 (Fed. Cir. 1985), In re Benno, 768 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985) and Ex parte Clapp, 227 USPQ 972 (BPAI 1985), among others.

As discussed in the July 13 Amendment, Lynch discloses a cellular telephone system in which priority of selective service provider acquisition during roaming is given to those service providers associated with the home service provider and identified by System Identification (SIDs) numbers. The SIDs of available system providers are compared to a list contained within the subscriber unit and selection is made based upon a priority of those system providers having arrangements with the home system provider. Column 9, lines 15-21 of Lynch (cited by the Examiner in support of the rejection of claims 4 and 5) simply discloses priority can be based upon RSSI or other system characteristics of the service provider. Thus, similar to Erekson, Applicant submits that it is quite clear that Lynch provides absolutely no teaching or suggestion which would motivate one of ordinary skill in the art to modify Wils to include the claimed feature that if at least one of the plurality of slaves has a higher RSSI or link quality value than another one of the plurality of slaves, the at least one of the plurality of slaves is given a higher priority, which is used to choose a new network master.

Further, Johansson do not teach or suggest the above-discussed features of the claimed invention which are missing from Wils, Erekson and Lynch.

Accordingly, Applicant submits that claims 4 and 5 should be allowable over the Examiner's proposed combination of Wils, Erekson, Lynch and/or Johansson.

### B.     Claims 8-16

With regard to claims 8 and 14, the Examiner asserts that Wils discloses all of the features of the claimed invention except for the rank assigned to the slave is assigned by the preexisting network master, which the Examiner asserts is disclosed by Shinji.  The Examiner further asserts that "[i]t would have been obvious to ... combine the teachings of Wils and Shinji because Shinji's teaching of the network master assigning slave rankings enables Wils' method to rank the priority of the back masters order by the original master."

Independent claim 8 recites in part:

> (b) if the preexisting network master has disappeared, <u>checking a rank assigned to the slave</u> *by the preexisting network master which determined the rank based on connection information received from the slave by the preexisting network master*, wherein the rank is used for choosing a new network master and is received before the disappearance of the preexisting network master.

Similarly, independent claim 14 recites in part:

> (b) checking backup master rank information <u>which is assigned to the slave by</u> *the preexisting network master which determined the backup master rank information based on connection information received by the preexisting network master from the slave*, when it is determined that the preexisting network master has disappeared in the step (a).

Applicant respectfully submits that it is quite clear that Wils and Shinji, alone or in combination, do not teach or suggest this feature of the claimed inventions.   In particular, nowhere does Wils teach or suggest that the preexisting network master determines and assigns a rank assigned to a slave based on connection information received from the slave.  Instead, Wils' discloses that when a Master router is unavailable, the routers broadcast their own Advertisement

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messages and compare the priorities of broadcast Advertisements with their configured priorities

such that the router having the highest configured priority for each Virtual Router assumes

Master status for that Virtual Router, and the other routers assume Backup status (see column 5,

lines 51-54 and column 6, lines 57-63 of Wils).

Shinji discloses that a present main station reads the priority order for change-over from a

main station change-over priority order storage means, generates the main station state

announcement in a main station state announcement announcing means and transmits it by multi-

address to slave stations.   When no reception continues for a fixed time or more, a slave station

refers to the change-over priority order, and if it judges that one's own main station change-over

priority order is the highest, the slave station individually transmits the main station register

request to the whole other slave stations, and changes-over the self station into the main one.

(see Abstract).

Nowhere does Shinji teach or suggest that the preexisting network master determines the

rank based on connection information received from the slave by the preexisting network master.

That is, Shinji does not disclose how the priority order is determined, but instead simply

discloses that the priority is stored at the present main station.

In addition, Ying and Akyol do not teach or suggest this feature of the claimed invention

which is missing from Wils and Shinji.

Further, one of ordinary skill the art would not have been motivated to modify Wils based

on Shinji to produce the claimed invention.  The Examiner's purported motivation is clearly

improper on its face since it is a perfect example of circular reasoning (i.e., it would have been

obvious to something in order to do it).  That is, the Examiner alleged motivation "because

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Shinji's teaching of the network master assigning slave rankings enables Wils' method to rank the priority of the back masters order by the original master" does not provide any objective reason or address why one skilled in the art would have been motivated to modify Wils based on Shinji.

Accordingly, Applicant respectfully submits that claims 8 and 14, as well as dependent claims 9-13, 15 and 16, should be allowable over Wils, alone or in combination with Shinji, Erekson, Ying and/or Akyol.

## III.    Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited.  If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880.  Please also credit any overpayments to said Deposit Account.

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